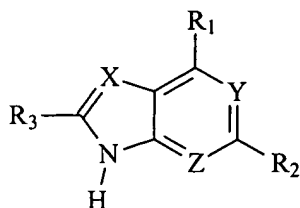


**CLAIM AMENDMENT**

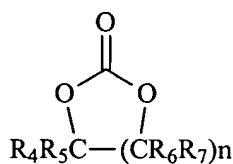
Please amend the claims as follows:

1 (original). A method of preparing a compound according to Structure 3 comprising:

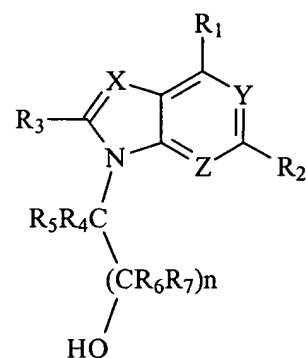
reacting a heterocyclic base according to Structure 1 with a compound according to Structure 2 in dimethylacetamide to form a product according to Structure 3;



Structure 1



Structure 2



Structure 3;

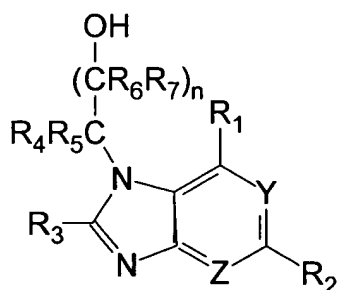
wherein X, Y and Z are independently N or CR, with R being H, halogen, OH, NH<sub>2</sub>, or substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, or alkaryl;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, and R<sub>7</sub> are independently H, halogen, OH, NH<sub>2</sub>, CO(NH<sub>2</sub>), CNH(NH<sub>2</sub>), N<sub>3</sub>, or substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, or alkaryl;

wherein n is an integer between 1 and 3; and

isolating Structure 3 from the dimethylacetamide solvent using isopropanol or tert-butylmethylether.

- 2 (original). The method of claim 1 wherein X, Y and Z are N, and wherein R<sub>1</sub> is NH<sub>2</sub>, R<sub>2</sub> and R<sub>3</sub> are H.
- 3 (original). The method of claim 1 wherein R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, and R<sub>7</sub> are H, and wherein n is 1.
- 4 (original). The method of claim 1 wherein Structure 3 is isolated from the dimethylacetamide solvent using isopropanol.
- 5 (original). The method of claim 1 wherein the step of reacting includes heating of the heterocyclic base according to Structure 1 and the compound according to Structure 2 to a temperature of no less than 150 centigrade.
- 6 (original). The method of claim 1 wherein the step of reacting includes heating of the heterocyclic base according to Structure 1 and the compound according to Structure 2 to a temperature of no less than 160 centigrade.
- 7 (original). The method of claim 1 wherein the step of reacting is performed in the presence of a basic catalyst.
- 8 (original). The method of claim 7 wherein the basic catalyst is NaOH.
- 9 (original). The method of claim 1 wherein X is N, and wherein the step of reacting the heterocyclic base according to Structure 1 with the compound according to Structure 2 further leads to an N7-alkylated byproduct according to Structure 4



Structure 4.

- 10 (original). The method of claim 9 wherein the step of reacting the heterocyclic base with the compound gives a total yield of the product and the N7-alkylated byproduct of at

least 82%, and wherein about 98% of the total yield is the product and wherein about 1% of the total yield is the N7-alkylated byproduct.

11 (original). The method of claim 9 wherein the step of reacting the heterocyclic base with the compound gives a total yield of the product and the N7-alkylated byproduct of at least 87%, and wherein about 97% of the total yield is the product and wherein about 1.1% of the total yield is the N7-alkylated byproduct.

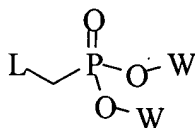
12 (original). The method of claim 9 wherein the step of reacting the heterocyclic base with the compound gives a total yield of the product and the N7-alkylated byproduct of at least 91%, and wherein about 97% of the total yield is the product and wherein about 1.3% of the total yield is the N7-alkylated byproduct.

13 (original). The method of claim 1 wherein the heterocyclic base is present in the dimethylacetamide at a concentration of up to 220mM.

14 (original). The method of claim 1 wherein the heterocyclic base is present in the dimethylacetamide at a concentration of up to 270mM.

15 (original). The method of claim 1 further comprising reacting the product according to Structure 3 with a phosphonate.

16 (original). The method of claim 15 wherein the phosphonate has a structure according to Structure 5



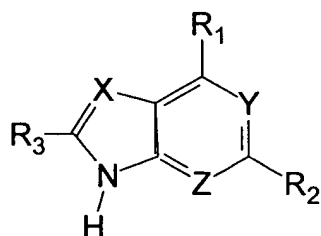
Structure 5

wherein L is a leaving group, and wherein W is a protecting group of the oxygen.

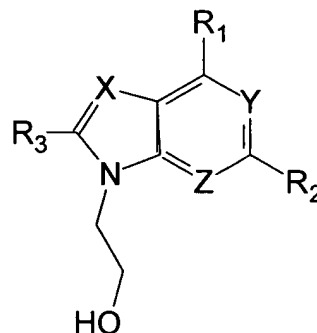
17 (original). The method of claim 16 wherein L is a tosyl group and wherein W is ethyl group.

18 (currently amended). A method of preparing a compound according to Structure 3 comprising:

reacting a heterocyclic base according to Structure 1 in a solvent ~~with~~ dimethylacetamide with ethylene oxide to form a product according to Structure 3;



Structure 1



Structure 3

wherein X, Y and Z are independently N or CR, with R being H, halogen, OH, NH<sub>2</sub>, or substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, or alkaryl;

wherein R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> are independently H, halogen, OH, NH<sub>2</sub>, CO(NH<sub>2</sub>), CNH(NH<sub>2</sub>), N<sub>3</sub>, or substituted or unsubstituted alkyl, alkenyl, alkynyl, aryl, or alkaryl; and

reacting the product according to Structure 3 with a phosphonate to obtain an antiviral nucleoside analog.

19 (original). The method of claim 17 wherein the solvent is dimethylacetamide.